



A.D. 1859, 17th OCTOBER. N^o 2367.

S P E C I F I C A T I O N

OF

WILLIAM EDWARD NEWTON.

PRESERVING AND DISINFECTING ORGANIC
SUBSTANCES.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

PRINTERS TO THE QUEEN'S MOST EXCELLENT MAJESTY:

PUBLISHED AT THE GREAT SEAL PATENT OFFICE,

25, SOUTHAMPTON BUILDINGS, HOLBORN.

Price 3d.

1860.



A.D. 1859, 17th OCTOBER. N^o 2367.

Preserving and Disinfecting Organic Substances.

LETTERS PATENT to William Edward Newton, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, for the Invention of "**IMPROVEMENTS IN PRESERVING AND DISINFECTING ORGANIC SUBSTANCES.**"—A communication from abroad by Vincent Marie Féraud, Leonard Laureau, and Felix Richard, all of Paris, in the Empire of France.

Sealed the 3rd April 1860, and dated the 17th October 1859.

PROVISIONAL SPECIFICATION left by the said William Edward Newton at the Office of the Commissioners of Patents, with his Petition, on the 17th October 1859.

I, WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, 5 in the County of Middlesex, Civil Engineer, do hereby declare the nature of the said Invention for "**IMPROVEMENTS IN PRESERVING AND DISINFECTING ORGANIC SUBSTANCES,**" to be as follows :—

The object of this Invention is to preserve animal or vegetable substances from decay by preventing or arresting the progress of fermentation. This 10 object is effected by submitting the substance to be operated upon to the action of some convenient hydrocarbon.

The Invention is applicable to the preservation of animal substances, such as meat, leather, skins, and also to the disinfection of feculent matters, such as the excrement and urine of animals, the refuse of slaughter-houses, tanneries, 15 soap works, and other manufactures where organic matters are used in the arts. Hydrocarbons may be obtained, as is well known, from various mineral or vegetable substances, such as coal, mineral pitch, bituminous schist, some vegetable gums or gum resins, turpentine, rosin, rosin oil, and other substances.

Newton's Improvements in Preserving and Disinfecting Organic Substances.

The dense hydrocarbons or heavy oils, as they are termed, are preferred for the purpose of the present Invention, and as the cost of the different hydrocarbons varies, the choice of the particular one to be employed must depend upon the substance to be operated upon, as the heavy and coarser hydrocarbons may be suitable for rough processes, such as making manures, whereas a purer and 5 uncolored hydrocarbon will be preferable for operating upon substances which would be liable to be discolored by using the coarser substance.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said William Edward Newton in the Great Seal Patent Office on the 17th April 1860. 10

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, WILLIAM EDWARD NEWTON, of the Office for Patents, 66, Chancery Lane, in the County of Middlesex, Civil Engineer, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Seventeenth day of October, in the year of our Lord 15 One thousand eight hundred and fifty-nine, in the twenty-third year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said William Edward Newton, Her special license that I, the said William Edward Newton, my executors, administrators, and assigns, or such others as I, the said William Edward Newton, my executors, administrators, and assigns, 20 should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for “**IMPROVEMENTS IN PRESERVING AND DISINFECTING ORGANIC SUBSTANCES,**” being a 25 communication from abroad, by Vincent Marie Feraud, Leonard Laureau, and Felix Richard, all of Paris, in the Empire of France, upon the condition (amongst others) that I, the said William Edward Newton, by an instrument in writing under my hand and seal, should particularly describe and ascertain the nature of the said Invention, and in what manner the same was 30 to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said William Edward Newton, do hereby declare the nature of the said Invention, and in what manner the same is 35 to be performed, to be particularly described and ascertained in and by the following statement thereof (that is to say) :—

Newton's Improvements in Preserving and Disinfecting Organic Substances.

The principle of this Invention consists in the employment of heavy hydrocarbons and oils extracted from mineral or vegetable pitch or tar, naphtha, bitumen, asphalt, resins, balms, and other analogous carbonaceous matters. These hydrocarbons, in the proportion of 5 per cent., or even less, possess
5 the property of preventing organic matters, either of animal or vegetable origin, from putrifying. They also possess the property of preserving organic matters for any length of time, and by preventing fermentation in fresh substances they will arrest decomposition when the articles operated upon had already undergone a change. Of course, if the proportion of hydrocarbons be
10 greater, the effect will be more powerful.

The hydrocarbons which have the greatest preserving properties are those distilled under 150 degrees heat of the centigrade thermometer. The oils extracted at lower or higher temperatures owe a certain amount of their preserving power to their containing a greater or less proportion of hydro-
15 carbon, and the employment of these matters is included under the present Patent.

The preservation of all organic matters, without interfering in any way with their various uses in the arts, manufactures, and agriculture, by the addition of the said hydrocarbons to such matters, or their immersion in those hydro-
20 carbons when brought to a liquid state, is therefore claimed under the present Patent.

The Invention may be employed,—

1st, for blood, whether employed for the extraction of albumen, or for the preparation of prussiates and of Prussian blue.

25 2nd, for skins of animals, whether intended to be tanned, dressed, or manufactured into fur.

3rd, for the intestines of oxen, sheep, pigs, and horses, whether to be employed for the manufacture of catgut, goldbeaters' skin, or for other purposes.

30 4th, for the refuse of slaughter-houses, and boiling and melting houses, poultry and game which is too high, and all animal matters from which grease is extracted for the manufacture of soap. In order to bleach fatty matters and remove any offensive odor, they are first boiled in fresh or salt water, and then filtered upon animal charcoal, at a convenient temperature
35 and pressure.

5th, the refuse of distilleries or manufactories from which alcohol is produced, but the offensive smell from which causes these manufactories to be subjected to regulations which prevent the primary matters from being completely utilized, and which are, therefore, almost entirely lost.

Newton's Improvements in Preserving and Disinfecting Organic Substances.

6th, for the primary matters or refuse of breweries, starch manufactories, washing-houses, or laundries, glue manufactories, and manufactories of train, fish, and animal oil, establishments for flaying animals, washing wool, manufactories of soap, tallow, bones, and glucose, tripe-houses, and generally all insalubrious establishments where nitrogenous and putrescent matters are 5 employed.

7th, for threads, cords, cloths, and tissues of all kinds, whether made of hemp, flax, wool, silk, or other fibrous substances, and also for woods of all kinds.

8th, for grain and seeds of all kinds from which vegetables are produced. 10

9th, for the eggs of silkworms.

10th, for substances which may be used as manures, such as guano, fish refuse, horns, bones, and other analogous substances.

11th, for alimentary substances.

In case the smell of the hydrocarbons should be objectionable at the time 15 the matters preserved are required to be employed, this may be removed by treating them with sulphuret of carbon, and which is also claimed as part of this Invention.

For common or valueless matters, the products of the most common pitch and tar are employed as disinfecting agents, and transportable products are 20 thereby obtained suitable for use as manures for agricultural purposes. For substances which are required to be perfectly inodorous, or the color of which is not to be changed in any way, resinous oils which are colorless or perfectly inodorous are employed.

By the employment of this Invention the most offensive manufactories may 25 receive their primary matters, prepare their products, and run off their refuse without giving off any noxious effluvia.

In witness whereof, I, the said William Edward Newton, have hereunto set my hand and seal, this Sixteenth day of April, in the year of our Lord One thousand eight hundred and sixty. 30

W. E. NEWTON. (L.S.)

Witness,

J. W. MOFFATT,

66, Chancery Lane.

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1860.